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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,960	10/24/2001	Diane M. Landers	DP-304036/DE3-0204	7043
22851 7590 12/22/2006 DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007			EXAMINER PROCTOR, JASON SCOTT	
			ART UNIT 2123	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/032,960

Applicant(s)

LANDERS ET AL.

Examiner

Jason Proctor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 11, 12, 23, 28, 83 and 84 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 12, 23, 28, 83 and 84 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 1-3, 11-12, 23-31, 39-40, 51-59, 67-72, and 80-82 were rejected in the Office Action of 28 June 2006.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 October 2006 has been entered.

Applicants' response submitted on 26 October 2006 has amended claims 1-3, 23, and 28; and cancelled claims 4-10, 13-22, 24-27, and 29-82; and entered new claims 83-84. Claims 1-3, 11, 12, 23, 28, 83, and 84 are pending in this application.

Claims 1-3, 11, 12, 23, 28, 83, and 84 are rejected.

### ***Priority***

Applicants' claim for priority under 35 U.S.C. § 119(e) to application 60/276,255 filed on March 14, 2001 is acknowledged.

***Terminal Disclaimer***

1. The terminal disclaimer filed on 18 April 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on application 10/355,749 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Specification***

2. The disclosure is objected to because of the following informalities:

At page 4, line 30 – page 5, line 5, the specification incorporates by reference copending US Patent Application 09/483,301 but leaves blank the US Patent Number. That application has issued. Applicants are requested to amend the specification to contain the patent number.

***Claim Rejections - 35 USC § 112***

The previous rejections under 35 U.S.C. § 112 have been withdrawn in response to the amendments to the claims and cancellation of claims.

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 84, 23, and 28 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, upon which claim 84 depends, recites:

*“(3) each of the form features is associatively independent from each other of the form features” (lines 15-16)*

Claim 84 recites:

*“The method of Claim 1 further includes generating a link between at least two of the form features.”*

The single limitation of claim 84 apparently contradicts the referenced limitation of claim 1. By “generating a link between at least two of the form features,” the requirement of claim 1 that “each of the form features is associatively independent from each other of the form features” is violated. According to claim 84, at least two of the form features are associatively dependent by virtue of the link created between them.

The contradictory claim limitation in claim 84 renders the scope of the claim indefinite. Claims 23 and 28, which depend from claim 84, are similarly indefinite.

Regarding the meaning of “associatively independent,” the Examiner applies the plain meaning of these terms to claim 1. It is noted that claim 3 further limits the term “associative independency” to “a lack of a parent/child relationship,” however it would be improper to apply that limitation to claim 1 as written.

### ***Claim Rejections - 35 USC § 101***

The previous rejections under 35 U.S.C. § 101 are withdrawn in response to the cancellation of claims.

35 U.S.C. § 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-3, 11, 12, 23, 28, 83, and 84 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

A method of manipulating a model, comprising the steps of establishing (a plurality of sets of coordinate references), adding (a base feature), and adding (a plurality of form features, and wherein acting on any one form features will not affect any other one of the form features), is broad enough to encompass an abstract idea, because the steps of the method may be performed mentally to manipulate an abstract, mental model.

The claimed invention is directed to such a method in a “CAD/CAM environment” and is therefore understood to be an attempt to patent a practical application of an abstract idea.

MPEP 2106(IV)(C)(1) states:

For claims including such excluded subject matter to be eligible for patent protection, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S. at 187, 209 USPQ at 8 (“application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”); Benson, 409 U.S. at 71, 175 USPQ at 676 (rejecting formula claim because it “has no substantial practical application”). A claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it:

- (A) “transforms” an article or physical object to a different state or thing; or
- (B) otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

The claimed invention clearly does not “transform” an article or physical object to a different state or thing. Therefore, the claimed invention must produce a useful, concrete, and tangible result in order to qualify as statutory subject matter.

However, the claim language is broad enough to encompass performing the steps of establishing, adding, and adding entirely within the internal operation of the computer and discarding or ignoring whatever might result from the method. Further, a model in a “CAD/CAM environment” is merely computer data. Therefore, without any recited steps of

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utilizing the resulting method, the claim merely manipulates computer data. The claim language is not limited to producing a *tangible* result, and therefore the claimed invention has no substantial practical application.

Claim language that restricts the broadest reasonable interpretation of the method to producing a *tangible* result, such as displaying the model with a “user-friendly graphical user interface” (Specification, page 22, lines 3-17) for example, would overcome this rejection.

Claims rejected but not specifically mentioned stand rejected by virtue of their dependence.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. § 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

### ***Claim Rejections - 35 USC § 102***

The previous rejections under 35 U.S.C. § 102 are withdrawn in response to the amendments to the claims and cancellation of claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claim 83 is rejected under 35 U.S.C. § 102(b) as being anticipated by "Solid Edge™ User's Guide Version 6" by Unigraphics Solutions™ Inc., © 1998 (Unigraphics).

Regarding claim 83, Unigraphics discloses several models which appear to be substantially identical to the claimed model (pages 28-38). Claim 83 is understood to be a *product-by-process claim* and is therefore interpreted in accordance with MPEP 2113.

### ***Applicants' Admissions***

6. Several of the rejections under 35 U.S.C. §§ 102 and 103, below, make reference to Applicants' admissions as found in the disclosure of the application. The Examiner has provided a selection of these admissions below for Applicants' convenience, however this selection is not intended to be exhaustive.

Page 3, lines 2-5

The disclosed method may be implemented on any CAD/CAM software package that supports (a) reference planes or their Cartesian equivalents, (b) parametric modeling or its equivalent, and (c) feature modeling or its equivalents.

Page 3, lines 16-24

Throughout this specification, examples and terminology will refer to Unigraphics® v-series software for illustrative purposes, but the method is not to be construed as limited to that particular software package. Other suitable CAD/CAM software packages that meet the three criteria above and that would therefore be suitable. For example, other suitable software packages include, but may not be limited to, SOLID EDGE®, also by Unigraphics®, CATIA® by IBM®. Note that the phrases "datum planes", "parametric modeling", and "features" are phrases derived from the Unigraphics® v-series documentation and may not necessarily be used in other software packages.

Page 13, lines 12-15

In the Unigraphics® environment, the exemplary embodiment takes advantage of the existing link and unlink functionality of the Unigraphics® CAD/CAM system software coupled with the methods of horizontally structured CAD/CAM modeling to facilitate an enhanced method of modeling.

Page 13, lines 20-22



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The disclosed embodiments are equally applicable to any CAD/CAM system software, which exhibits or possesses the dictated requirements and capabilities.

Page 33, lines 17-17

It should be noted the disclosed embodiments may be implemented on any CAD/CAM software system that supports the following functions and capabilities: reference planes, datum planes or similar Cartesian equivalents; parametric modeling, or similar equivalent; and feature modeling or similar equivalents.

***Potentially Allowable Subject Matter***

7. None of claims 1-3, 11, 12, 23, 28, or 84 are rejected under 35 U.S.C. §§ 102 or 103. However, all pending claims are rejected under 35 U.S.C. § 101, while claims 23, 28, and 84 are rejected under 35 U.S.C. § 112. The Examiner refrains from making a statement of reasons for indicating allowable subject pending the manner in which the rejections under 35 U.S.C. §§ 101 and 112 are overcome.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Proctor whose telephone number is (571) 272-3713. The examiner can normally be reached on 8:30 am-4:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached at (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

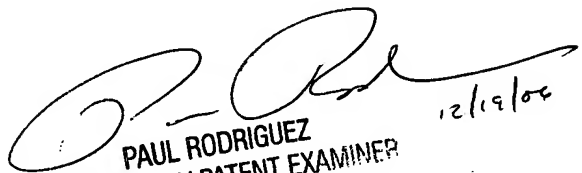
Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR)

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system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 2123

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12/19/02